

Burndown weed control with BAS851 and Reviton in soybean

Trial ID: NTS02-23 Study Dir.: Sprague, Stiles
 Conducted: Campus, C-13 Investigator: Christy Sprague

Planting Date: May-15-2023 **Row Spacing:** 30 IN
Variety: P25A16E **No. of Reps:** 4
Population: 150000 S/A **% OM:** 2.7
Soil Type: CL clay loam **pH:** 7.0
Plot Size: 10 X 25 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops: No-tilled into corn stubble.

Fertilizer:

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1	STEME	common chickweed	Stellaria media
2	TAROF	dandelion	Taraxacum officinale
3	ERICA	horseweed	Erigeron canadensis
4	CHEAL	common lambsquarters	Chenopodium album
Crop	Code	Common Name	
1	GLXMA	Soybean	

Application Description

Application Timing: A
7 EPP
Date Treated: May-5-2023
Time Treated: 5:15 PM
% Cloud Cover: 25
Air Temp., Unit: 70
% Relative Humidity: 39
Wind Speed/Unit/Dir: 5 MPH S
Soil Temp, Unit: 62 F
Leaf Moist/Dew Presence (Y/N): N
Soil Moist: 4

Crop Stage at Each Application

Crop 1 Name: A
GLXMA
Height:
Stage:

Weed Stage at Each Application

Weed 1 Name: A
STEME
Height: 8-12 " (10)
Stage: flower
Weed 2 Name: TAROF
Height: 10-12 " (10)
Stage: flower
Weed 3 Name: ERICA
Height: 2-4 " (4)
Stage: 8-20L
Weed 4 Name: CHEAL
Height:
Stage:

Weed Density

Date:	1	2	3	4
	May-5-2023	May-5-2023	May-5-2023	May-5-2023
Weed Name:	STEME	TAROF	ERICA	CHEAL
Density:	4 ft2	1 ft2	2 ft2	1 ft2

Application Equipment

Appl	Sprayer Type	Ground Speed	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	Spray Volume	Carrier	Operation Pressure
A	CUB	3.8 MPH	AIXR	11003	18 "	20 "	100.0 "	19 GAL/AC	WATER	30 PSI

Comments:

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Trial ID: NTS02-23

Protocol ID: NTS02-23 Location: Campus, C-13 Trial Year: 2023

Study Director: Sprague, Stiles Sponsor Contact:

Investigator: Christy Sprague

Rating Date	May-12-2023	May-12-2023	May-12-2023	May-19-2023	May-19-2023	May-19-2023
Rating Type	control	control	control	control	control	control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Pest Code	ERICA	STEME	TAROF	ERICA	STEME	TAROF
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	14 DA-A	14 DA-A	14 DA-A
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing	May-12-2023	May-12-2023	May-12-2023	May-19-2023	May-19-2023	May-19-2023
1	Untreated					0	0	0	0	0	0
2	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	3	28	20	10	76	74
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
3	BAS 85100H	1 fl oz/a		A	7 EPP	99	91	99	99	98	100
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
4	Zidua SC	3.25 fl oz/a		A	7 EPP	81	41	71	80	85	76
	2,4-D Ester LV 6	10.7 fl oz/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	Crop oil concentrate	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
5	BAS 85100H	1 fl oz/a		A	7 EPP	99	85	98	100	97	98
	Zidua SC	3.25 fl oz/a		A	7 EPP						
	2,4-D Ester LV 6	10.7 fl oz/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
6	Boundary	1.5 pt/a		A	7 EPP	15	23	20	18	88	55
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	Crop oil concentrate	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
7	BAS 85100H	1 fl oz/a		A	7 EPP	100	93	100	99	100	98
	Boundary	1.5 pt/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
8	Matador-S	3 pt/a		A	7 EPP	16	21	20	13	93	51
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	Crop oil concentrate	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
9	BAS 85100H	1 fl oz/a		A	7 EPP	100	94	99	99	100	100
	Matador-S	3 pt/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
10	Reviton	1 fl oz/a		A	7 EPP	56	81	98	28	99	100
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
11	Reviton	1 fl oz/a		A	7 EPP	63	83	98	30	93	100
	Helmet MTZ	2.1 pt/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
12	Reviton	1 fl oz/a		A	7 EPP	73	80	98	94	100	98
	Helmet MTZ	2.1 pt/a		A	7 EPP						
	2,4-D Ester LV 6	10.7 fl oz/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
13	Reviton	1 fl oz/a		A	7 EPP	60	83	96	21	97	100
	Zone Elite	32 fl oz/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						

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Study Director: Sprague, Stiles Sponsor Contact:

Investigator: Christy Sprague

Rating Date	May-12-2023	May-12-2023	May-12-2023	May-19-2023	May-19-2023	May-19-2023
Rating Type	control	control	control	control	control	control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Pest Code	ERICA	STEME	TAROF	ERICA	STEME	TAROF
Trt-Eval Interval	7 DA-A	7 DA-A	7 DA-A	14 DA-A	14 DA-A	14 DA-A
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing	May-12-2023	May-12-2023	May-12-2023	May-19-2023	May-19-2023	May-19-2023
14	Sharpen	1 fl oz/a		A	7 EPP	100	84	100	100	99	100
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal		A	7 EPP						
	LSD P=.05					4.3	4.2	3.6	8.2	5.4	10.6
	Standard Deviation					3.0	3.0	2.5	5.7	3.7	7.4
	CV					4.93	4.71	3.48	10.2	4.28	9.04

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Protocol ID: NTS02-23 Location: Campus, C-13 Trial Year: 2023

Study Director: Sprague, Stiles Sponsor Contact:

Investigator: Christy Sprague

Rating Date	May-26-2023	May-26-2023	May-26-2023	Jun-2-2023	Jun-2-2023	Jun-2-2023
Rating Type	control	control	control	control	control	control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Pest Code	ERICA	STEME	TAROF	ERICA	STEME	TAROF
Trt-Eval Interval	21 DA-A	21 DA-A	21 DA-A	28 DA-A	28 DA-A	28 DA-A
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing	May-26-2023	May-26-2023	May-26-2023	Jun-2-2023	Jun-2-2023	Jun-2-2023
1	Untreated					0	0	0	0	0	0
2	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	8	95	91	10	100	97
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
3	BAS 85100H	1 fl oz/a		A	7 EPP	97	100	100	97	100	95
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
4	Zidua SC	3.25 fl oz/a		A	7 EPP	94	96	90	98	100	96
	2,4-D Ester LV 6	10.7 fl oz/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	Crop oil concentrate	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
5	BAS 85100H	1 fl oz/a		A	7 EPP	100	99	90	100	100	85
	Zidua SC	3.25 fl oz/a		A	7 EPP						
	2,4-D Ester LV 6	10.7 fl oz/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
6	Boundary	1.5 pt/a		A	7 EPP	15	99	85	25	100	94
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	Crop oil concentrate	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
7	BAS 85100H	1 fl oz/a		A	7 EPP	98	100	99	96	100	89
	Boundary	1.5 pt/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
8	Matador-S	3 pt/a		A	7 EPP	18	99	80	20	100	87
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	Crop oil concentrate	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
9	BAS 85100H	1 fl oz/a		A	7 EPP	98	100	99	99	100	96
	Matador-S	3 pt/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
10	Reviton	1 fl oz/a		A	7 EPP	25	100	100	20	100	100
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
11	Reviton	1 fl oz/a		A	7 EPP	33	99	100	30	99	98
	Helmet MTZ	2.1 pt/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
12	Reviton	1 fl oz/a		A	7 EPP	100	100	98	96	100	95
	Helmet MTZ	2.1 pt/a		A	7 EPP						
	2,4-D Ester LV 6	10.7 fl oz/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						
13	Reviton	1 fl oz/a		A	7 EPP	18	100	100	23	100	94
	Zone Elite	32 fl oz/a		A	7 EPP						
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal	gal	A	7 EPP						

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Rating Type	control	control	control	control	control	control
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Pest Code	ERICA	STEME	TAROF	ERICA	STEME	TAROF
Trt-Eval Interval	21 DA-A	21 DA-A	21 DA-A	28 DA-A	28 DA-A	28 DA-A
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing	May-26-2023	May-26-2023	May-26-2023	Jun-2-2023	Jun-2-2023	Jun-2-2023
14	Sharpen	1 fl oz/a		A	7 EPP	99	100	100	100	100	99
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP						
	MSO	1 % v/v		A	7 EPP						
	AMS	8.5 lb/100 gal		A	7 EPP						
	LSD P=.05					8.8	4.2	14.4	10.0	1.0	10.7
	Standard Deviation					6.2	2.9	10.0	7.0	0.7	7.5
	CV					10.8	3.17	11.42	12.01	0.78	8.55

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Trial ID: NTS02-23

Protocol ID: NTS02-23 Location: Campus, C-13 Trial Year: 2023

Study Director: Sprague, Stiles Sponsor Contact:

Investigator: Christy Sprague

Rating Date	Jun-2-2023
Rating Type	control
Rating Unit/Min/Max	%, 0, 100
Pest Code	CHEAL
Trt-Eval Interval	28 DA-A
Number of Decimals	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing	
1	Untreated					0
2	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	3
	AMS	8.5 lb/100 gal	gal	A	7 EPP	
3	BAS 85100H	1 fl oz/a		A	7 EPP	100
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	
	MSO	1 % v/v		A	7 EPP	
	AMS	8.5 lb/100 gal	gal	A	7 EPP	
4	Zidua SC	3.25 fl oz/a		A	7 EPP	100
	2,4-D Ester LV 6	10.7 fl oz/a		A	7 EPP	
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	
	Crop oil concentrate	1 % v/v		A	7 EPP	
	AMS	8.5 lb/100 gal	gal	A	7 EPP	
5	BAS 85100H	1 fl oz/a		A	7 EPP	100
	Zidua SC	3.25 fl oz/a		A	7 EPP	
	2,4-D Ester LV 6	10.7 fl oz/a		A	7 EPP	
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	
	MSO	1 % v/v		A	7 EPP	
	AMS	8.5 lb/100 gal	gal	A	7 EPP	
6	Boundary	1.5 pt/a		A	7 EPP	100
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	
	Crop oil concentrate	1 % v/v		A	7 EPP	
	AMS	8.5 lb/100 gal	gal	A	7 EPP	
7	BAS 85100H	1 fl oz/a		A	7 EPP	100
	Boundary	1.5 pt/a		A	7 EPP	
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	
	MSO	1 % v/v		A	7 EPP	
	AMS	8.5 lb/100 gal	gal	A	7 EPP	
8	Matador-S	3 pt/a		A	7 EPP	100
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	
	Crop oil concentrate	1 % v/v		A	7 EPP	
	AMS	8.5 lb/100 gal	gal	A	7 EPP	
9	BAS 85100H	1 fl oz/a		A	7 EPP	100
	Matador-S	3 pt/a		A	7 EPP	
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	
	MSO	1 % v/v		A	7 EPP	
	AMS	8.5 lb/100 gal	gal	A	7 EPP	
10	Reviton	1 fl oz/a		A	7 EPP	100
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	
	MSO	1 % v/v		A	7 EPP	
	AMS	8.5 lb/100 gal	gal	A	7 EPP	
11	Reviton	1 fl oz/a		A	7 EPP	100
	Helmet MTZ	2.1 pt/a		A	7 EPP	
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	
	MSO	1 % v/v		A	7 EPP	
	AMS	8.5 lb/100 gal	gal	A	7 EPP	
12	Reviton	1 fl oz/a		A	7 EPP	100
	Helmet MTZ	2.1 pt/a		A	7 EPP	
	2,4-D Ester LV 6	10.7 fl oz/a		A	7 EPP	
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	
	MSO	1 % v/v		A	7 EPP	
	AMS	8.5 lb/100 gal	gal	A	7 EPP	
13	Reviton	1 fl oz/a		A	7 EPP	100
	Zone Elite	32 fl oz/a		A	7 EPP	
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	
	MSO	1 % v/v		A	7 EPP	
	AMS	8.5 lb/100 gal	gal	A	7 EPP	

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Rating Date	Jun-2-2023
Rating Type	control
Rating Unit/Min/Max	%, 0, 100
Pest Code	CHEAL
Trt-Eval Interval	28 DA-A
Number of Decimals	0

Trt No.	Treatment Name	Rate	Unit	Appl Code	Appl Timing	
14	Sharpen	1 fl oz/a		A	7 EPP	100
	Roundup PowerMax 3	20 fl oz/a		A	7 EPP	
	MSO	1 % v/v		A	7 EPP	
	AMS	8.5 lb/100 gal		A	7 EPP	
	LSD P=.05					1.9
	Standard Deviation					1.3
	CV					1.56